METHOD AND APPARATUS OF CT IMAGING WITH VOLTAGE MODULATION

Abstract of Disclosure

A system and method of diagnostic imaging with reduced x-ray exposure to the scan subject during scanning includes acquiring a set of cardiac signals or other motion (cardiac mechanical motion or respiratory motion) related signals and determining and imaging profile therefrom. Pursuant to the imaging profile, voltage applied to an x-ray source is modulated to provide an energizing voltage during primary data acquisition stages and a reduced voltage during secondary or non-data acquisition stages. Voltage modulation repeats until sufficient data for image reconstruction has been acquired.